

Chapter III

PLANNING

TABLE OF CONTENTS

SECTION I	INTRODUCTION
	Appendix
SECTION II	REGULATORY DEVELOPMENT
	Appendix
SECTION III	GRANTS AND WORK PLAN MANAGEMENT
	Appendix
SECTION IV	REGIONAL AND LOCAL AGENCY COORDINATION
	Appendix
SECTION V	EMISSION INVENTORY
	Appendix
SECTION VI	MODELING
SECTION VII	TRAINING
	Appendix
SECTION VIII	SMALL BUSINESS ASSISTANCE PROGRAM

Section 1

INTRODUCTION

The areas of review in this chapter include;

- Regulatory Development
- Emission Inventory
- Grant and Work plan Management
- Regional Office and Local Agency Coordination
- Training
- Modeling
- Small Business Assistance Program

EPA specialists in the emission inventory, modeling, and asbestos programs interviewed the respective MDNR program specialists at their offices in Jefferson City. The Small Business Assistance Program information was gathered through telephone interview. The remaining information was gathered during the on-site visit by the EPA APDB Missouri coordinator during interviews with the MDNR's Air Pollution Control Program's Planning Section (PS) Chief and staff, and the Administration Section Chief.

The organizational structure of the MDNR air program is;

Missouri Department of Natural Resources
Division of Environmental Quality
Air Pollution Control Program
Planning Section
Permits Section
Enforcement Section
Technical Support Section
Administration Section

The PS is one of five sections under the office of the Air Pollution Control Program (APCP) director. There are presently 21 positions assigned to this section; three clerical, six in the Inspection/Maintenance (I/M) Unit, and 12 in the Rules/State Implementation Plan (SIP) Development Unit. At the time of this review, there were two vacancies in the I/M Unit, and one in the Planning Unit. A personnel/organization chart is shown in the

Appendix.

In addition to the Headquarters staff in Jefferson City, there are six regional offices geographically dispersed throughout the state. These offices do not participate substantially in the PS planning activities, but primarily respond to citizens complaints and conduct inspections of air emission sources. A map showing the location of these offices is included in the Appendix. There are also four local agency air programs; located in St. Louis City, St. Louis County, Kansas City, and Springfield-Greene County. These programs have their own area-specific rules that supplement state rules applicable in their area.

The APCP does not itself adopt air pollution rules. This function is maintained by the Missouri Air Conservation Commission (MACC). The Commission consists of seven members, who are appointed by the Governor. Each member's term is for four years, but they may be reappointed. The MACC conducts public hearings and takes testimony on proposed rulemakings. After a public period has been provided and the rule is finalized, the PS staff presents the final rulemaking to the MACC and the MACC votes whether to adopt it.

The MACC conducts at least nine monthly meetings a year. A list of the current MACC members is included in the Appendix.

APPENDIX - Introduction

Personnel/Organization Chart

Regional and Satellite Offices Map

Missouri Air Conservation Commission Members List

Section II

REGULATORY DEVELOPMENT

The PS is responsible for rule development and SIP submittals to EPA. The air program is continuously developing new rules or revising existing rules. Over the past several years, many new rules have been developed and adopted to address the ozone nonattainment problem in St. Louis, for example, and routine rule revisions are necessary to adopt ongoing federal requirements. The PS has also undertaken the project of rescinding local agency rules from the SIP, where possible, and replacing them with more current state-wide rules. It is estimated that the PS managed nearly 50 rule development/revision packages within the past two years. The PS also develops and manages numerous source/project specific SIP submittals such as the lead SIPs and ozone nonattainment SIPs, and 111(d) plans.

The MDNR has a very involved and time consuming process with regards to rule development and implementation. The PS has developed a very thorough Rulemaking Manual which contains information to be used by the section rule writers in writing the rules and moving them through the administrative process. A copy of this 500 page manual is available at the APDB office for review.

Since this manual was developed about five years ago, the quality and timeliness of rule development and SIP submittals has improved significantly. The manual contains form letters, templates, flowcharts, checklists, and references. It includes rule author procedures and checklists, clerical procedures, and sample rule package examples. It also includes information on rule presentation to the MACC, and a section on SIP submittals. The following flowcharts and checklists are included in the Appendix of this section for reference;

- Rulemaking Timeline
- Rulemaking Process Flowchart
- Rule Author Project Checklist
- Air Quality Plans Development Flowchart
- State Air Quality Plans Reference Chart
- Planning Interfaces Chart

The PS is to be commended for the development of this document.

A review of the Rulemaking Timeline chart above shows several built-in time constraints which sometimes place the PS staff under difficult circumstance. For example, the staff usually has at most two weeks to finalize a rule after the close of the public comment period. This includes developing a response-to-comments document, a final rule, and submitting the necessary documents for the MACC meeting at which rule adoption will be voted on. Another critical time constraint is the requirement that, from the close of the public comment period until the filing of the final rule with the Secretary of State's office, must not exceed 90 days. In addition, the final rule must be submitted to the Joint Committee on Administrative Rules a minimum of 30 days prior to filing with the Secretary of State's office. If this filing date is missed, the rule cannot become effective, and the rule making process must be started over. Despite these hurdles the PS staff smoothly and successfully completes numerous rule making actions each year.

In order to track the progress of each rule as it goes through the rule making process the PS has developed a report titled, Rules In Progress Schedule. This schedule tracks 10 benchmarks as a rule moves through the rule making process. It contains both dates of completed actions and planned actions. This schedule has proved very helpful to EPA staff who must participate in the rule making process; for example, provide comments on a draft rule, or provide testimony at the public hearing for the rule.

A similar tracking form is maintained for source or project specific SIP actions. This report, State Air Quality Plans Status Report, is updated at least monthly, and helps track those SIP actions which do not necessarily involve rule making. The EPA staff finds this report very useful in tracking the status of the state's actions on these activities. A copy of both reports is included in the Appendix of this section.

The PS staff also expends considerable resources each month supporting the MACC. In addition to responding to Commission members' individual requests for information throughout the month, the staff provides planning reports, meeting agendas, meeting minute inputs and other special request information for inclusion in the monthly MACC briefing document. This document contains minutes from the previous meeting, monthly reports prepared by the Planning, Permits, and Enforcement Sections, documents for any rule making actions which may be before the

Commission that month (either a public hearing on a draft rule, or a vote for rule adoption), and other new business. This document generally is between 150-200 pages in length and is provided to the MACC and the public approximately 10 days before each MACC meeting. There are about 500 copies mailed each month to those on the MDNR's mailing list.

The APCP director and staff frequently provide briefings at the MACC meetings in order to keep the MACC Commissioners informed of high priority projects the staff is working on, projects that are of special interest to the public, and other relevant ongoing activities. The staff recently gave a presentation on the APCP rule making process. A copy of this presentation is included in the Appendix.

APPENDIX - Regulatory Development

Rule Making Manual Documents

- Rulemaking Timeline
- Rulemaking Process Flowchart
- Rule Author Project Checklist
- Air Quality Plans Development Flowchart
- State Air Quality Plans Reference Chart
- Planning Interfaces Chart

Rules in Progress Schedule

State Air Quality Plan Status Report

Rule Making Process Presentation

Section III

GRANT AND WORK PLAN MANAGEMENT

GRANT

The scope of this program review did not include a financial audit of the state's management of Federal funds received in support of its environmental programs. However, the Air Pollution Control Program's Administration Section chief was interviewed to gain an understanding how the MDNR accounts for the section 105 air grant funds it receives.

The MDNR operates under a Performance Partnership Agreement (PPA) and Performance Partnership Grant (PPG) with Region 7. Thus, the air program section 105 air grant funds are awarded as part of the PPG. However, the MDNR tracks, through the use of unique budget codes, expenses charged against its section 105 grant allocation. The MDNR also, at times, receives project specific section 105 funds, i.e., St. Louis air toxics study. These funds are also assigned a unique budget code. In this manner, the MDNR charges expenses to, and tracks, its use of the air grant dollars it receives from Region 7.

A portion of the program's funds comes from Title V fees, which cannot be used to support section 105 grant funded activities. The Title V fees are used to fund the operating permit program activities. The Administration Section tracks the total revenue and expenses of the Title V fee account and reports annually to the MACC on the status of these funds. The most recent report, June 29, 2000, estimates that Title V fees will have to be increased significantly in 2004. The report is included in the Appendix.

A breakdown of funding and expenses for FY-2000 is shown below.

Sources of Revenue for FY-2000

Category	Amount	Percent
General Revenue	\$ 654,000	6
Federal Grant	2,796,000	25
Permit Fees	300,000	3
Asbestos	192,000	2
Emission Fees	5,682,000	51

Vehicle Emission Inspection Fee	534,000	5
Interest Earned	929,000	8
TOTAL	11,100,000	

Categories of Expenditures

Category	Amount	Percent
Salaries	\$ 5,764,417	40
Fringe Benefits	1,379,273	9
Operating Expenses	3,428,598	24
Grants to Local Air Agencies	2,698,642	18
Refunds	53,729	<1
Department Overhead	1,379,108	9
TOTAL	14,700,000	

Work Plans

With the recent advent of a two year work plan as part of the PPA, the state and EPA have begun to work more closely to develop shared environmental goals and objectives, which in turn are reflected in the APCP work plan.

The state has three planning documents which define the states' goals and objectives. In the first, broad goals for state government are set out by the Governor as part of his "Show-Me Results" strategic planning objectives. The "Show-Me Results" goal for air is; "Increase percentage of Missourians living where air and drinking water meet government standards as measured by compliance with air quality standard, ..." (see Appendix.) These objectives are posted on the state web site at "www.cpi.state.mo.us/mo_smr_title.htm."

Second, the MDNR planning objectives are published each year in its "Integrated Strategic Plan" (see Appendix.) This document identifies the vision, mission, and values of the MDNR, and further refines the environmental goals of the state by specifying outcome measures, objectives, objective measures, and strategies for each environmental media. For the air media the FY-2000 document shows:

Goal: Air - Preserve and protect the quality of Missouri's air resources.

Outcome A - Missourians living where air meets government air quality standards.

Outcome Measure - The percent of Missourians living where air meets government air quality standards (Show-Me Result).

Objective 1 - Reduce emissions, concentrations and exceedances for criteria and toxic air pollutants.

Objective Measures -

- Decreased yearly emission totals for criteria and toxic pollutants (corrected for number of sources).
- Reduction in the number of days per year the National Ambient Air Quality Standards (NAAQS) for ozone is exceeded at monitoring locations.
- Reduced annual average ambient concentration levels of criteria pollutants.

Objective 2 - Reduce the average quarterly concentrations of lead in ambient air.

Objective Measures -

- Reduced quarterly lead concentration levels near lead smelters.
- Reduction in the average blood lead levels in children as measured by the Missouri Department of Health.

Objective 3 - By 2005, reduce emissions of greenhouse gases to 1990 levels.

Objective Measures -

- Estimated trends in tons of emissions of carbon dioxide.
- Estimated trends in tons of emissions of methane.
- Estimated trends in tons of emissions of nitrous oxide and other greenhouse gases.

- Tons of coal, barrels of petroleum, cubic feet of natural gas consumed.

Objective 4 - Improve Missouri's ambient visibility in sensitive areas.

Objective Measure -

- Increase in the number of days with visibility range greater than fifty miles at Hercules Glade and Mingo National Wilderness Areas.

Each of the Objectives are followed by a list of strategies (outputs) which, when implemented, will lead to accomplishment of the Objectives. The objectives and strategies are similar to those EPA develops for the Government Performance and Results Act and which are contained in the Office of Air and Radiation (OAR) annual Operating Plan.

The third document, the Division of Environmental Quality's "Fiscal Year 2000 Situational Analysis," is very detailed and contains budget and staffing projections for the upcoming year, and a very detailed work plan analysis of anticipated APCP activities. It is forwarded up through channels and used to support the MDNR's budget and staffing request with the legislature. The work plan activities portion of the report is similar to the Region 7 Division and Branch Operating Plans.

This document contains a table (below) which shows staff positions assigned to sections within APCP, and the funding source for those positions for FY-2000.

Program FTE Allocation by Function and Fund

Major Functions	General Revenue	Federal FY 1999	Federal FY2000	Asbestos	Emission Fees	Enhanced I/M	CMAQ	TOTAL
Director's Office	0.42	0.20	0.58		2.80			4.00
Administration	1.22	0.49	1.49		7.80	1.00		12.00
Enforcement	3.90	0.50	1.49	5.00	7.11			18.00
Planning	2.40	0.47	1.40		10.75	4.24	3.74	23.00
Permits	1.43	0.62	1.86		26.09			30.00
Tech. Support	3.03	0.83	2.48		19.41			25.75
TOTAL APCP	12.40	3.11	9.30	5.00	73.96	5.24	3.74	112.75

Discussions with the MDNR air program staff and a review of the aforementioned documents indicates that EPA's goals contained in the OAR Operating Plan, and Region 7 air priorities, are factored into the MDNR documents mentioned above. This is accomplished by a late winter meeting between senior program managers of Region 7 and MDNR in which joint priorities are discussed, and by the communications between the EPA Air Planning and Development Branch (APDB) and the APCP in the spring when air program specific work plan activities are negotiated. These commitments are funded, in part, with federal section 105 grant funds. These funds are part of the MDNR's Performance Partnership Grant. The APCP provides a semi-annual and annual report on its work plan accomplishments. A copy of the FFY-00 Semi-Annual Report is included in the Appendix.

In summary, the MDNR has an effective process for establishing its own environmental goals and priorities, communicates effectively to establish joint priorities with EPA where possible, and reflects these priorities in its air program work plan with EPA.

APPENDIX - Grant and Work Plan Development

Financial Report - Projection of Revenues and Expenses

Show-Me Results Report

Integrated Strategic Plan Fiscal Year 2000 (excerpt)

Semi-Annual Report FFY-2000

Section IV

REGIONAL AND LOCAL AGENCY COORDINATION

As briefly mentioned in section II, there are four independent local agency air programs in the state. These programs focus on their own geographical areas of responsibility but must coordinate and cooperated with the APCP on a nearly daily basis.

The APCP has an annual work plan agreement with each of the local agencies, similar to that between the state and EPA (see Appendix.) This agreement contains commitments for emission inventory activities, monitoring activities, inspection and enforcement activities, and in some cases permitting activities. The local agencies report quarterly to the APCP on their work plan accomplishments.

The APCP annually audits at least one of the local agencies to access program performance. The most recent audit was of the St. Louis City Division of Air Pollution Control, in July, 1999. A copy of the audit report is contained in the Appendix.

APPENDIX - Regional and Local Agency Coordination

APCP/St. Louis City FY-2000 Agreement

St. Louis Audit Report

Section V

TRAINING

The APCP has an annual training budget set for each individual, which has recently been increased from \$1,200 to \$1,500. A new staff person may be allowed more, however, whereas an experienced person may not need that much. Each person has an annual training plan which lists training desired for the upcoming year. Each employee's performance appraisal planning document also has a training element identified as an annual requirement.

Training is obtained on-site through the Air Pollution Training Institute satellite downlink. These broadcasts are also taped for viewing at a later date by new employees or by staff who were not able to be present at the time of the original broadcast. Off-site training is also provided within the confines of the individual training allowance.

The MDNR staff fully participates in training offered by the Region 7 air program, at the State/Local Directors semi-annual meetings, and the semi-annual Permits workshops. Staff also attends training/conferences on monitoring, modeling, and emission inventory activities as time and budget allow.

The Planning Section organizes and coordinates an annual workshop for the regional and local agency staff. This workshop is presented by APCP staff. This two-three day workshop, generally held off-site at a state park conference center, brings together and unites all of the state air pollution control staff from the Jefferson City office and from all the out-state offices. This activity provides an excellent forum for training, coordination, and communication amongst the various offices. Agendas from two recent workshops are included in the Appendix.

APPENDIX - Training

Workshop Agendas

Section VI

EMISSION INVENTORY

Inventory Planning and Management

The Emissions Inventory Unit of the Technical Support Section collects information about air emissions from all regulated air pollution sources within Missouri.

The Inventory Preparation Plan (IPP), Quality Assurance/Quality Control (QA/QC) Plan, and Procedures Manual (PM) serve as the foundation that the emission inventory is built from each year. All three of these documents are updated as needed. The PM is located in the emission inventory supervisor's office for new employees and for quick reference by current employees. An IPP was developed in 1992. This could not be immediately found during the site visit. A comprehensive point source QA/QC manual is also kept in the emission inventory supervisor's office for reference.

MDNR sends out Emission Inventory Questionnaires (EIQ) each January to regulated pollution sources. There are several iterations of the EIQ and the version sent out depends on the amount of pollution that is historically emitted from a particular facility. A special form is sent to dry cleaners. Packets also include a note describing all recent changes in AP-42 emission factors.

The emission inventory questionnaire forms were developed in 1992. The four local agencies (St. Louis City, St. Louis County, Springfield, and Kansas City) that collect emission inventory information use the same forms as the state. A coordination meeting between MDNR and the four local agencies occurs each August. MDNR also communicates on a weekly to monthly basis with the local agencies on a more informal basis. MDNR feels the local agencies do a good job collecting information and getting it to MDNR by the agreed deadline.

The initial mail-out to sources in Missouri for 1999 included 1,150 Full EIQ packets, 276 EZ packets (facilities with low emissions), 155 Fee Only packets (facilities emitting below the de minimus level), 161 Dry Cleaners packets, 177 Portable

Equipment packets, and 31 Charcoal Kiln packets. This comes to a total of 1,950 packets sent to regulated facilities in Missouri. The four local agencies sent out an additional 707 facility packets. Currently, these regulated facilities have submitted more than \$5.5 million dollars in emission inventory fees.

MDNR has a Technical Assistance Program (TAP) which helps small businesses fill out their Emission Inventory Questionnaire form free of charge. This program started in the early 1990s. Interest among industry in EIQ training has declined significantly during the last few years.

When EIQ forms change, MDNR seeks input from affected industry and trade associations. Many businesses claim they could not fill out their EIQ form due to employee turnover. It was not clear whether or not these claims were referred to the TAP or to annual training sessions that occur in Kansas City and St. Louis.

Data Documentation and Data Entry Procedures

The EIQ forms are due back on April 1st. Once received by MDNR, they are entered into a tracking system. The forms are put into a secured file area where they must be checked out by staff for subsequent data entry and review.

The staff keeps a check-sheet to track missing data. Forms requesting all non-submitted information are sent back to sources for completion before data entry begins.

Sources that do not return their EIQ forms are called by telephone and sent reminders by mail. If the form is not returned by June the source is flagged for an enforcement action.

The Technical Support staff is currently installing a new database system called the Missouri Emission Inventory System (MoEIS). More information regarding the review of MoEIS is available in Appendix A.

The staff is working to implement the full range of automated quality assurance checks into the database system. The program does not currently check facility calculations or the range of values entered into the system, although this feature is being planned for implementation.

There is no historical data in the current database system. It does not have an automated inventory data dump into the NET format for submission to EPA.

MDNR Response

The APCP has access to historical data in our Paradox database system. We are capable of supplying EPA with the data in a NET format and we plan to automate the "download" from MOEIS to NET in the future.

Emissions Reporting and Submission

Missouri submitted its 1996 criteria and toxic inventories to the EPA in the electronic NET format. The criteria inventory submission contained sources emitting greater than 100 tons per year in attainment counties and 25 tons per year in non-attainment counties. They were unable to fill all the required fields for submission since they do not collect certain required elements from industry. Most notably, they do not distinguish emission release point types (such as stacks versus fugitive emissions.)

MDNR Response

We will revise our Emission Inventory Questionnaire forms to indicate the type of emission point.

An attempt to identify as many as possible based on the emission release description was made but this did not result in a fully populated inventory field. No additional quality assurance measures were taken during the conversion of data from the old Paradox data format to the new NET format. Facilities that identify certain process description codes as trade secret had emissions reported as an aggregate for the entire facility. This is because the NET format does not include a field designating emission release data as private. Since the EPA stated all information submitted to the NET would be considered public information Missouri could not submit the data marked private due to legal considerations. Missouri is the only state in the country that protects this information.

MDNR Response

The data in Paradox was previously quality assured when it was received. Quality assurance measures were implemented again when the data was converted (see attached memo from Mike Stansfield.)

Facilities and Resources

Each employee has their own work space (office or cubicle) that appears sufficient to effectively complete their daily tasks. All employees have access to the Internet and have easy access to on-line versions of AP-42 and the Emission Inventory Improvement Program (EIIP) inventory guidance volumes. A procedures manual and QA/QC manual are kept in the Emission Inventory supervisor's office. This office serves as the centralized library for emission inventory procedures and guidance.

Emission Inventory Development

Special Inventory Initiatives

The biogenic inventory supporting the St. Louis Periodic Emission Inventory for 1996 has been corrected based on monitor information obtained through the OZIE study. This study estimated that the BEIS model over-predicted biogenic VOC emissions (by a factor of 2).

A detailed and extensively quality assured inventory was prepared for the NO_x SIP Call. Additional questionnaires were sent to NO_x SIP Call sources and potential sources. This initiative resulted in improved coordinate information and heat throughput data for the surveyed facilities. Increased scrutiny was given to each submittal regarding the correct use of AP-42 emission factors and emissions calculations. The result is an excellent comprehensive inventory of NO_x sources in Missouri for 1995 and 1996.

A full air toxics inventory is being prepared for the St. Louis area in support of the St. Louis Clean Air Project. This is

the first toxics inventory in Region 7 that will compile toxic emissions from area, mobile, and off-road mobile sources.

Geographic coordinates from major point sources in Missouri have been collected by inspectors and interns during the last few years. This data has not been joined to the emissions database at this time, but MDNR expects to do this in the near future. The coordinates are taken at a facility's front door and are not inclusive of emission release point coordinates. It is unclear whether or not these updated coordinates will be included in the 1999 emission inventory submittal.

Traditional Emission Inventories

Missouri has compiled point source information for the past 10 years. Non-point source data have only been compiled for the St. Louis non-attainment area and Kansas City maintenance area in the past. Currently, Missouri is planning to complete a state-wide mobile and area source inventory for 1999. This will consist of ozone precursors only.

Missouri completes point source inventories for all criteria pollutants and hazardous air pollutants. MDNR is not currently compiling data for PM_{2.5} or ammonia emissions because the PM_{2.5} standard is being reviewed by the Federal courts.

Appendix B contains more detailed information regarding the collection of point, area, on-road mobile, off-road mobile, and biogenic inventories in Missouri.

Computer System Review

See Appendix C for more details regarding which elements of the computer program were reviewed. The new database system is called MoEIS and has not been fully implemented. When it is fully installed it will be an excellent tool for the staff by reducing workload and improving the quality of data.

Missouri is planning to have industry directly enter their emissions information via the world wide web beginning in the summer of 2002.

Recommendations and Discussion

- EPA does not currently require processes to be labeled as to which MACT standard they are regulated by, but this will certainly be a need in the future during the residual risk assessment process. This is because many MACT standards apply at the process level of a facility and trading between MACT processes is allowed in some instances.
- Report the emission type, such as horizontal or vertical stack and fugitive emissions.
- Join the updated GPS facility coordinates to the emissions data.
- Need to implement automated QA/QC into MoEIS since the 1999 inventory is currently being compiled.
- Develop a fixed program extension to MoEIS to dump emissions data into the NET format for submittal to EPA.
- Begin planning to compile a statewide PM area and mobile source inventory to meet the upcoming needs for Regional Haze modeling.
- Begin planning to compile a statewide off-road mobile inventory for all pollutants.
- Work to promote TAP to businesses in order to keep submitted EIQ data quality at a high level.

Commendations

- Everyone in the section has a set amount of training budget per year which gives everyone an equal opportunity to keep up with the changing inventory methodology.
- The potential of MoEIS is exceptional. The final product will be powerful and should help reduce the workload of staff and minimize data entry errors.
- The tracking system does a good job of making sure all sources submit data to the inventory and that the sources submit all required data before data entry is initiated.

- The toxic inventory for the St. Louis Community Air Project is the first non-point source toxics inventory in the Region to date. This initiative will establish the knowledge and skill to compile this type of inventory as needs arise in the future.
- The NO_x SIP Call inventory is a thorough compilation of NO_x sources in Missouri and improved several important types of data received from this group of sources.
- The yearly coordination with the local agencies is extremely valuable in keeping the positive working relationship with these agencies and ensuring a quality product.

APPENDIX - Emission Inventory

Planning Checklist

Inventory Checklist

Computer Checklist

Section VII

MODELING

The review of the air dispersion modeling activities of the Air Pollution Control Program, Missouri Department of Natural Resources (MDNR), involved meetings with four of the Technical Support Staff. A limited review of the modeling associated with construction/operating permits was done. As expected, the review of the MDNR modeling activities confirmed that the modeling staff are very knowledgeable in air dispersion modeling and follow EPA modeling guidelines (40 CFR, Part 51, Appendix W, Guideline on Air Quality Models).

Their modeling activities include review of Prevention of Significant Deterioration (PSD) permit applications, State Implementation Plans (SIP), and regional modeling. Pre-application meetings, working with the consultant/company during development of an application, and final evaluation of the modeling are the usual techniques done by the staff in an evaluation. Site visits are frequently made to assist in the evaluations. Emission inventories and meteorological data are part of the evaluation. In some cases the staff does modeling in support of an application, e.g., Doe Run Herculaneum (SIP) and Fort Leonard Wood (PSD). Extensive regional modeling for ozone has been done, or is being done, in the Saint Louis and Kansas City areas.

An area that needs to be revisited is the modeling associated with the construction and/or operating permits. Screening modeling for construction/operating permits is usually done by permit engineers. This is not unique to the MDNR. The screening involves the use of a nomogram that was prepared by the technical staff, or the use of the SCREEN3 model. The nomogram is considered conservative by the staff. The nomogram does not contain a background concentration. We recommend that a background value be included in the nomogram. A background value should be added to any SCREEN3 concentration. The modeling staff rarely see the screening modeling. Many of the permits that were reviewed had PM₁₀ limits close to the 24-hour National Ambient Air Quality Standards (NAAQS) limit of 150 micrograms per cubic meter. Our concern is that the SCREEN3 model does not always predict higher concentrations than a refined model, i.e., a

refined model may predict concentrations greater than the NAAQS.

While concentrations from these minor source permit emission limits may meet the NAAQS, they frequently allow the short-term increment standard of 30 mg/m³ to be exceeded. Although increments are usually not considered until a PSD permit application is submitted, increments are consumed and may prevent a future PSD application from being approved unless the existing sources that have construction/operating permits reduce their emissions. We recommend that increment consumption be considered in evaluating these minor sources as well as any PSD source.

There is a need for continued training in modeling. Training for the new models, e.g., AERMOD, CALPUFF, recently proposed for inclusion in the Guideline for Air Quality Models will be required. Training for regional models, e.g., MODELS 3, will also be necessary. The training must include emission inventory, e.g., SMOKE, and meteorological, e.g., MM5, models as well as the air dispersion models.

MDNR Response

The APCP appreciates the support and answers to questions provided by EPA Region VII. The cooperation received from EPA Region VII allows modeling staff to communicate effectively with industry and consultants regarding difficult issues.

Procedures used for nomograph and screening analysis conducted by permit engineers are under constant evaluation. The use of background concentrations for this type of analysis is of particular interest. In the past, background concentrations have not been used due to the conservative nature of the screening analysis. However, based upon the recent changes to the nomographs and EPA's concerns, APCP will reevaluate the need for inclusion of background concentrations in screening analysis.

In addition, minor source permits issued in PSD baseline areas must have an increment evaluation as described in 10 CSR 6.060(6). The modeling group has emphasized this issue to the construction permit group and improvements have been made. However, the issuance of minor source permits and the tracking of baseline areas are important parts of the permit rule.

Therefore, we are committed to examining these permits closely and ensuring the necessary increment evaluation is conducted.

Section VIII

SMALL BUSINESS ASSISTANCE PROGRAM

Section 507(a) of the Clean Air Act requires each state to administer a Small Business Assistance Program (SBAP) that provides small, stationary source businesses with technical and environmental compliance assistance.

To review the state of Missouri's SBAP, eleven questions were used to assess the status of the program. Those eleven questions and the respective answers are outlined below.

1. *Are the Ombudsman and Compliance Assistance Program (CAP) positions filled in accordance with Section 507(a) of the Clean Air Act?*

Finding: The Ombudsman is in place and six of the seven CAP members have been appointed and they are fulfilling their responsibilities identified by the Clean Air Act.

2. *Does the Ombudsman have direct access to state agencies and officials to relay concerns of small businesses?*

Finding: Yes. In fact, the Ombudsman is located in the office of the Governor which promotes enhanced access and recognition of the Ombudsman's role.

3. *Does the Ombudsman have authority and access to obtain data from state agencies?*

Finding: Yes. The Ombudsman has this access and utilizes it as necessary. Again, this access is enhanced by virtue of being located in the Governor's office.

4. *Have sufficient resources been provided to successfully fulfill Ombudsman / SBAP responsibilities?*

Finding: The Program has headquarters in Jefferson City and offices in Lee's Summit and St. Louis. There is a budget, adequate staffing, and regular meetings including a full calendar of events hosted by the SBAP.

5. *Has the CAP rendered any opinions on the effectiveness of the SBAP effectiveness?*

Finding: The panel has stated in public forums their belief that the SBAP is very effective and have, on several occasions, commended the Technical Assistance Program for their efforts in assisting small businesses. The panel has stated their concern as to the effectiveness of the Ombudsman. Although these commendations have not been entered in a formal written document, these sentiments have been stated during the committee meetings.

6. *Have any reports been submitted to EPA's Small Business Ombudsman?*

Finding: The "State Small Business Stationary Source Technical and Environmental Compliance Assistance Program (SBTCP) Annual Reporting Form" has been provided to EPA's Ombudsman every year since 1995. This report covers the previous year's activities.

7. *What outreach techniques are currently used by the SBAP?*

Finding: The program features seminars, the Internet, public meetings, on-site visits, technical bulletins, and articles in state publications as well as a toll-free phone number for inquiries.

8. *Does the SBAP coordinate with other programs, states, etc?*

Finding: The Missouri program actively participates in a forum of small business representatives facilitated by Region 7 as well as the national network of small business assistance programs.

9. *Describe how well the SBAP provides compliance assistance to identify applicable requirements and obtain appropriate permits.*

Finding: As described in item #7, the program utilizes every conceivable means of outreach and more than adequately informs affected interests. Based on the input received during the public meetings, both the CAP and the public consider this program very effective.

10. *Has a method been established for ascertaining the eligibility of small businesses to receive assistance under the SBAP?*

Finding: The state adopted regulations that reflect the eligibility definitions outlined in the Clean Air Act.

11. *What mechanisms exist to exclude sources with sufficient financial and technical resources to meet their obligations?*

Finding: The state currently uses the approach of extending and offering assistance to any entity that meets the small business eligibility requirements identified by the Clean Air Act and the state's regulations.

Summary and Recommendations: The state administers a very effective program. By maintaining three offices and holding regular meetings and offering a variety of outreach activities, small businesses are provided a wealth of compliance assistance.

The only shortcoming noted during this review concerned the state's website listing of the Ombudsman (it features the name of a previous Ombudsman rather than the current one). However, any inquiries by small businesses do lead to the correct telephone and e-mail address of the Ombudsman so this is a relatively small matter compared to the overall effectiveness of the program.